

Cloverleaf Interchange, Bridge No. 5820  
At the Junction of Trunk Highways  
52, 3, and 55  
Inver Grove Heights  
Dakota County  
Minnesota

HAER No. MN-76-A

HAER  
MINN  
19-IVGRHE  
1A-

PHOTOGRAPHS  
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Department of the Interior  
Denver, Colorado 80225-0287

**HISTORIC AMERICAN ENGINEERING RECORD****CLOVERLEAF INTERCHANGE, BRIDGE NO. 5820**

**Location:** At the junction of Trunk Highways 52, 3 and 55,  
Inver Grove Heights, Dakota County, Minnesota.

**UTM:** 15.493140.4964220  
USGS Inver Grove Heights, Minnesota Quadrangle  
1967

**Date of Construction:** 1940

**Present Owner:** Minnesota Department of Transportation, 395 John  
Ireland Boulevard - 612 E, St. Paul, Minnesota,  
55155

**Present Use:** The bridge, which is part of a cloverleaf interchange,  
carries vehicular traffic on Trunk Highways 3 and  
52 over Trunk Highway 55.

**Significance:** Bridge No. 5820, a three-span continuous reinforced  
concrete deck girder bridge, is significant for being  
one of only seven bridges of its type in Minnesota  
with individual spans longer than 60 feet.  
It is one of only two of those seven which have more  
than one span. Bridge No. 5820 is an integral  
component of Cloverleaf Interchange (HAER No.  
MN-76), which is a very early example in the state  
of that type of highway separation.

**Historians:** Frances P. Alexander, Holly K. Chamberlain, Travis  
Dolence, and Olga Dunlap, The 106 Group Ltd., St.  
Paul, Minnesota, March 1994.

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**LOCATION DESCRIPTION**

Cloverleaf Interchange, Bridge No. 5820 carries Trunk Highway (TH) 52 and TH 3, a four lane, divided highway, over four lane TH 55 in Inver Grove Heights, Dakota County, Minnesota. This grade separation bridge is part of a cloverleaf highway interchange in this suburb south of St. Paul. (See HAER No. MN-76, Cloverleaf Interchange, for more information.) The Interstate 494 beltway around the Twin Cities is located approximately three miles to the north.

**PHYSICAL DESCRIPTION**

Bridge No. 5820 is a simple, continuous reinforced concrete deck girder bridge with three spans. The main span measures 60 feet 3 2/8 inches. The total length of the bridge is 129 feet 6 inches. The bridge is roughly 58 feet wide to accommodate four lanes of traffic and two sidewalks. The vertical clearance is approximately 16 feet. The bridge crosses TH 55 at an 85 degree skew.

The bridge has concrete piers and abutments, but no wingwalls. The piers are constructed as a solid arched arcade, and they rest on driven piles. The exterior piers have a geometric fluting decorative design, which is repeated on the rail posts and abutments. Between the rail posts is an ornamental iron railing.

**HISTORICAL INFORMATION**

Designed in July, 1939 to standard Minnesota Department of Highways specifications dated July, 1938, Bridge No. 5820 was built in 1940. E.J. Miller, a highway department employee, is listed on the plans as bridge engineer.<sup>1</sup> The bridge was built by Anderson and Sons, Contractors. It is one of the first five bridges built in Minnesota as part of highway grade separations. The first one was completed in 1939 at an unknown location.<sup>2</sup> Four more bridges, of

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<sup>1</sup>Minnesota Department of Highways, General Plan and Elevation for Continuous Reinforced Concrete Deck Girder Bridge Over Trunk Highway No. 55, Sheet 1 of 10.

<sup>2</sup>The first one may have been at Robbinsdale separating TH 100 and Jefferson Highway. The Report of the Minnesota Commissioner of Highways, January 1939 to June 30, 1940, is unclear on this point. According to

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which 5820 is one, were completed in 1940.<sup>3</sup> Construction costs for Bridge No. 5820 were \$16,569.<sup>4</sup>

Girder spans have become the most common type of bridge in the United States since their introduction in this country in 1846. The continuous variation of the form came into frequent use for highway bridges after the turn of the century. A distinguishing feature of this type of bridge is the length of its spans.<sup>5</sup> Within the realm of Minnesota bridges, Bridge No. 5820, a three-span continuous reinforced concrete deck girder bridge, derives its significance from being one of only seven bridges of its type in the state with individual spans longer than 60 feet. Furthermore, it is one of only two of those seven which have more than one span. The bridge is also significant for being an important element of one of the first five cloverleaf interchanges in the state, and the only one in Dakota County.

### **Alterations**

Bridge No. 5820 has fair integrity. The bridge retains its defining historic features, with few alterations. Minnesota Department of Transportation maintenance records indicate that nothing was done to the bridge until 20 years after its completion, when it required fourteen dollars worth of paint. However, the bridge is generally deteriorated and has been damaged by impacts from traffic accidents. There is spalling and cracking of concrete abutments, piers, and girders. Cracks have also led to further damage from salt and water actions.<sup>6</sup> In 1979, the bridge received a new asphalt overlay.

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photographs on page 14 of the report, the Robbinsdale bridge was visually very similar to Bridge No. 5820.

<sup>3</sup>Two other bridges in addition to 5820 were also designed in 1939. Report of the Minnesota Commissioner of Highways, January 1939 to June 30, 1940, p. 9.

<sup>4</sup>Minnesota Department of Transportation, Bridge Inventory Listing of Work by Bridge Number, 7 June 1993, p. 367.

<sup>5</sup>Carl W. Condit, American Building, (Chicago: The University of Chicago Press), 1982, pp. 225-226.

<sup>6</sup>Minnesota Department of Transportation Office of Bridges and Structures, Bridge Inspection Report, Bridge No. 5820, 1988 - 1991, pp. 1-2.

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**PROJECT INFORMATION**

This documentation was prepared in March, 1994 at the request of the Minnesota Department of Transportation in compliance with Section 106 of the National Historic Preservation Act of 1966. Bridge No. 5820 is slated for removal in 1994 due to deterioration. Project historians were Frances P. Alexander, Holly K. Chamberlain, Travis Dolence, and Olga Dunlap of The 106 Group, Ltd., 658 Grand Avenue, St. Paul, Minnesota, 55105. Project photographer was Mike Whye.

**SOURCES**

Condit, Carl W. American Building. Chicago: The University of Chicago Press, 1982.

Minnesota Department of Transportation Records.

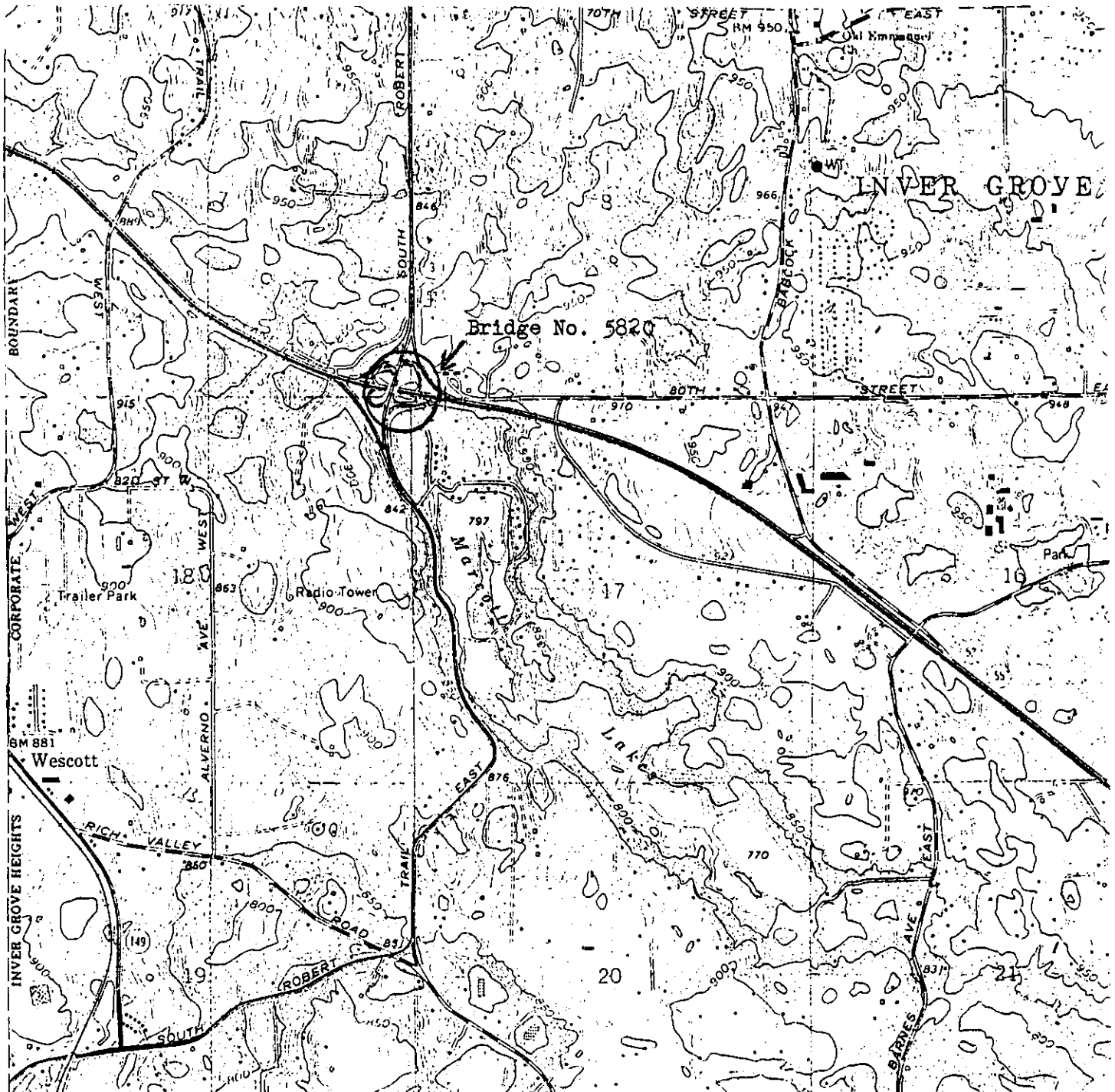
Minnesota Department of Highways. General Plan and Elevation for Continuous Reinforced Concrete Deck Girder Bridge Sheet 1 of 10 Drawings. July 28, 1939.

Report of the Minnesota Commissioner of Highways. July 1, 1939-June 30, 1940, and July 1, 1940-June 30, 1942.

**LIKELY SOURCES NOT YET INVESTIGATED**

Federal records stored at the National Archives at College Park may contain additional information on this bridge. The records were inaccessible at the time this documentation was being prepared due to their being in transit between the National Archives facility at Suitland, Maryland and the National Archives at College Park, Maryland. Future researchers may wish to consult Record Group 30, Bureau of Public Roads, for possible data on federal highway funding in the 1930s and 1940s. Bridge No. 5820 was part of Federal Aid Project 591-A.

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North ↑

Source: USGS Inver Grove Heights  
Quadrangle, Minnesota, 1967